

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 09 JAN 2006

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PCT

Applicant's or agent's file reference W0285WO		<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416
International application No. PCT/EP2004/010636		International filing date (day/month/year) 22.09.2004		Priority date (day/month/year) 01.10.2003
International Patent Classification (IPC) or national classification and IPC B65D41/04				
Applicant CROWN PACKAGING TECHNOLOGY INC. et al.				
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand  19.04.2005		Date of completion of this report  05.01.2006		
Name and mailing address of the international preliminary examining authority:  European Patent Office - Gitschiner Str. 103 D-10958 Berlin Tel. +49 30 25901 - 0 Fax: +49 30 25901 - 840		Authorized Officer  Kakoullis, M  Telephone No. +49 30 25901-586		



**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/EP2004/010636

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**Box No. I Basis of the report**

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1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

**Description, Pages**

1-10 as originally filed

**Claims, Numbers**

1-8 received on 19.04.2005 with letter of 11.04.2005

**Drawings, Sheets**

1/4-4/4 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/EP2004/010636

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	1-8
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-8
Industrial applicability (IA)	Yes: Claims	1-8
	No: Claims	

2. Citations and explanations (Rule 70.7):

**see separate sheet**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

1. Reference is made to the following document:

D1 : US 6 325 226 B1 (KRAUTKRAMER GUNTER) 4 December 2001 (2001-12-04)

2. Novelty and inventive step:

2.1 Independent claim 1:

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 does not involve an inventive step in the sense of Article 33(3) PCT.

The document US 6 325 226 B1 (D1) is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document):

A plastics closure (fig. 2) for a container, the closure comprising a top plate (2), a side skirt (1) depending from the periphery of the top plate (2), a sealing strip (4) depending from the top plate (2) and adapted to sealingly engage a container neck finish, and an abutment member (5) including a projecting guide member for guiding the sealing strip (4) towards the neck finish as the closure is applied, so that the strength of the seal is increased, wherein the guide member contacts the sealing strip over a relatively small area so that the friction between the strip (4) and the abutment member (5) is minimised.

The subject-matter of claim 1 therefore differs from this known plastics closure in that:

the sealing strip is inclined radially towards the neck finish for improving the sealing effect.

The problem to be solved by the present invention may therefore be regarded as to improve the sealing effect in a plastics closure of the type claimed.

The solution proposed in claim 1 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

Feature "sealing strip (4)" which is described in the closest prior art document D1 provides the same advantages as in the present application (see col. 3, l. 9-14).

Therefore the feature "inclined radially towards the neck finish" of claim 1 is merely one of several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, in order to solve the problem posed.

## **2.2 Independent claim 8:**

The same reasoning applies, mutatis mutandis, to the subject-matter of the corresponding independent claim 8, which therefore is also considered not inventive (Article 33(3) PCT).

## **2.3 Dependent claims 2-7:**

Dependent claims 2-7 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT).

All additional features of the claims 2-7 are disclosed in the closest prior art document D1 and are therefore not inventive as well (Article 33(3) PCT), see:

- for claims 2-4: D1: see sealing strip (4) in fig. 1a
- for claims 5, 6: D1: see sealing olive (3) in fig. 1a
- for claim 7: the additional feature of claim 7 is considered to be disclosed by

the prior art document D1 as well, i.e. "... adapted to seal on the inner surface of the neck finish".

However, claim 7 contradicts the embodiments disclosed in the description, thus resulting in lack of clarity (Article 6 PCT). No basis was found in the description for an embodiment wherein the sealing strip is adapted to seal on the inner surface of the neck finish whereby the sealing strip is simultaneously guided by an abutment member (combination of the claims 1 and 7).

3. Industrial applicability:

The industrial applicability of the claimed invention appears to be obvious so that the criterion set forth in Article 33(4) PCT is fulfilled.

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EPO - DG 1

CLAIMS:

19. 04. 2005

1. A plastics closure (10) for a container<sup>(40)</sup>, the closure (10) comprising a top plate (15), a side skirt (20) depending from the periphery of the top plate (15), a sealing strip (45) depending from the top plate and adapted to sealingly engage the side of a container neck finish (75), and an abutment member (55) including a projecting guide member (65) for guiding the sealing strip (45) towards the neck finish (75) as the closure (10) is applied, so that the strength of the seal is increased, wherein the guide member contacts the sealing strip over a relatively small area so that the friction between the sealing strip (45) and the abutment member (55) is minimised, characterised in that, the sealing strip (45) is inclined radially towards the neck finish (75) for improving the sealing effect.
2. A closure according to claim 1, wherein the sealing strip (45) tapers slightly away from the top plate (15).
3. A closure according to either of claims 1 or 2, wherein the surface (47) of the free end of the sealing strip (45) tapers sharply.
4. A closure (110) according to any preceding claim, wherein the sealing strip (145) is adapted to seal on the outer surface (180) of the neck finish.

5. A closure (110) according to claim 4, wherein the closure (110) further comprises a plug seal (190) adapted to seal on the inner surface (186) of the neck finish.

6. A closure (110) according to claim 5, wherein the plug seal (190) is adapted to exert an outward force on the neck finish (175) for causing the neck finish to move outwards, thereby increasing the strength of the seal from the sealing strip (145).

7. A closure (10) according to any of claims 1 to 3, wherein the sealing strip (45) is adapted to seal on the inner surface of the neck finish.

8. A container with a neck finish (75) in combination with a closure (10) according to any preceding claim.